

Country	Help number
Portugal	351-1-4149-500 351-14194-321 (fax)
Russia	7-095-929-9166 7-095-929-9170 (fax)
Singapore	65-470-9875 65-479-8397 (fax)
South Africa	27-11-804-2852 27-11-804-5013 (fax)
Spain	900-98-4485 44-131-458-6962 (fax)
Sweden	020-793169 44-131-458-6962 (fax)
Switzerland	155-1034 44-131-458-6962 (fax)
Taiwan	886-2-893-8210 886-2-895-1069 (fax)
Thailand	66-2-271-3040 66-2-279-5073 (fax)

Country	Help number
Turkey	90-216-342-3332 90-216-343-6743 (fax)
UK	0800-281487 44-0-131-458-6962 (fax)

Country	Help number
France	05-90-62-81 44-131-458-6962 (fax)
Finland	0800-1-17056 44-131-458-6962 (fax)
Germany	0130-82-54-02 44-131-458-6962 (fax)
Greece	30-1-689-8620 30-1-689-8635 (fax)
Hong Kong	852-2564-9330 852-2562-4258 (fax)
Hungary	36-1-269-71-17 36-1-269-71-13 (fax)
India	91-22-617-5823 91-22-617-6004 (fax)
Ireland	44-131-458-6714 44-131-458-6962 (fax)
Italy	1678-72996 44-131-458-6962 (fax)
Japan	81-3-5488-2390 81-3-5488-4512 (fax)

Country	Help number
Korea	82-2-708-5400 82-2-708-5500 (fax)
Latin America	1-305-267-4796 1-305-267-4770 (fax)
Lebanon	961-1-883822 961-1-881726 (fax)
Malaysia	60-3-757-2722 60-3-755-5919 (fax)
Mexico	52-5-326-3848 91-800-36412
Middle East	971-4-444-910 971-4-447-059 (fax)
Netherlands	06-0224428 44-131-458-6962 (fax)
New Zealand	0800-500-135 64-9-302-8637 (fax)
Norway	800-1-1848 44-131-458-6962 (fax)
Philippines	63-2-810-0331 63-2-816-6718 (fax)

If you have questions concerning the operation of the DC20 camera you may speak directly to a customer support representative.

In the U.S. and Canada—call toll free, 1-888-375-6325, between the hours of 9:00 a.m. and 8:00 p.m. (Eastern Standard Time) Monday through Friday.

In Europe—call the Kodak European Information Centre, toll free (number associated with your location) or UK toll line, 44-(0)-131-458-6714, between the hours of 09.00 and 17.00 hours (GMT/CET) Monday through Friday. Fax back service available 24 hours a day.

Outside the U.S., Canada, and Europe—call the number associated with your location.

Country	Help number
Argentina	541-808-3218
Australia	1-800-674-831
Austria	0-660-7348 44-131-458-6962 (fax)
Belgium	0800-7-2247 44-131-458-6962 (fax)
Brazil	0800-150000

Country	Help number
China— Shanghai	8621-64720888 8621-64726582 (fax)
China— Beijing	8610-3471155 8610-3475641 (fax)
Denmark	80-01-09-24 44-131-458-6962 (fax)
Egypt	20-2-394-2205 20-2-393-1199 (fax)

Appendix B...

Image Resolution—high 493 x 373 pixels
standard 320 x 240 pixels

Color—24-bit, millions of colors

Storage—1 MB internal

Image Storage—8 high resolution
16 standard resolution

Lens—focus free

Focus Distance—0.5 m to infinity

Exposure—automatic program

Shutter Speed—1/30 to 1/4000 sec

Aperture—f/4 to f/11

Power—one 3V lithium battery

Weight—4.2 oz. (110 g) without battery

Dimensions—1.2 x 4.0 x 2.4 in
(102 x 61 x 31 mm)

Sensitivity—equivalent to 800 to 1600 ISO

Kodak offers automated support for digital imaging products and services.

Product information can be faxed to you by calling:

In the U.S.—1-800-508-1531

In Canada—1-800-295-5531

In Europe—44-131-458-6962

In the UK—44-0-131-458-6962

Specifications...

Appendix A...

FCC Compliance and Advisory

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: 1) this device may not cause harmful interference, and 2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed or used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: 1) reorient or relocate the receiving antenna; 2) increase the separation between the equipment and the receiver; 3) connect the equipment to an outlet on a circuit different from that to which the receiver is connected; 4) consult the dealer or an experienced radio/TV technician for additional suggestions.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. Where shielded interface cables have been provided with the product or specified additional components or accessories elsewhere defined to be used with the installation of the product, they must be used in order to ensure compliance with FCC regulations.

Canadian DOC Statement

DOC Class B Compliance—This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the radio interference regulations of the Canadian Department of Communications.

Observation des normes-Class B—Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la Classe B prescrites dans les règlements sur le brouillage radioélectrique édictés par le Ministère des Communications du Canada.

Regulatory Information...

THIS WARRANTY APPLIES ONLY TO EQUIPMENT PURCHASED IN THE UNITED STATES

Warranty Time Period

Kodak warrants the Kodak Digital Science™ DC20 camera (excluding the batteries) to be free from malfunctions and defects in both materials and workmanship for one year from the date of purchase.

Warranty Repair Coverage

If the equipment does not function properly during the warranty period due to defects in either materials or workmanship, Kodak will, at its option, either repair or replace the equipment without charge, subject to the conditions and limitations stated herein. Such repair service will include all labor as well as any necessary adjustments and/or replacement parts.

If replacement parts are used in making repairs, these parts may be remanufactured, or may contain remanufactured materials. If it is necessary to replace the entire system, it may be replaced with a remanufactured system.

Kodak will also provide telephone assistance during the warranty period.

Limitations

Warranty service will not be provided without dated proof of purchase. Please return the Warranty Registration card within 30 days of purchase.

This warranty becomes null and void if you fail to pack your DC20 camera in a manner consistent with the original product packaging and damage occurs during product shipment.

This warranty does not cover: circumstances beyond Kodak's control; service or parts to correct problems resulting from the use of attachments, accessories or alterations not marketed by Kodak; service required as the result of unauthorized modifications or service; misuse, abuse; failure to follow Kodak's operating, maintenance or repackaging instructions; or failure to use items supplied by Kodak (such as adapters and cables).

KODAK MAKES NO OTHER WARRANTIES, EXPRESS, IMPLIED, OR OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE FOR THIS EQUIPMENT OR SOFTWARE.

Repair or replacement without charge are Kodak's only obligation under this warranty. **KODAK WILL NOT BE RESPONSIBLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES RESULTING FROM THE PURCHASE, USE, OR IMPROPER FUNCTIONING OF THIS EQUIPMENT REGARDLESS OF THE CAUSE.** Such damages for which Kodak will not be responsible include, but are not limited to, loss of revenue or profit, downtime costs, loss of use of the equipment, cost of any substitute equipment, facilities or services, or claims of your customers for such damages.

Application Support

For application specific support, contact your reseller, systems integrator, software manufacturer, or dealer.

How to Obtain Service

Visit us on the Internet at <http://www.kodak.com>

In the United States, call Kodak toll free at 1-888-375-6325, between the hours of 9:00 a.m. and 8:00 p.m. (Eastern time) Monday through Friday.

When returning a DC20 camera for repair, the unit shall be packed in its original packing materials. A problem report should also be enclosed with the equipment. If the original packaging has been discarded or is not available, packing will be at the owner's expense.

The repaired or replaced unit will be shipped from Kodak within five business days from the date of DC20 camera receipt at the service center.

Outside the United States

In countries other than the United States, the terms of warranty may be different. Unless a specific Kodak warranty is communicated to the purchaser in writing by a Kodak company, no other warranty or liability exists beyond the information contained above, even though defect, damage or loss may be caused by negligence or other act.

To obtain warranty repair service outside the United States, contact your local Kodak representative. For assistance, refer to Appendix B in this user's guide.

Warranty Information...

- ✓ To keep from damaging your DC20 camera, avoid exposing it to moisture and extreme temperatures.
- ✓ Clean the outside of the camera by wiping it with a clean, dry cloth. Never use harsh or abrasive cleaners or organic solvents on the camera or any of its parts.
- ✓ Never disassemble or touch the inside of the camera. This could result in electrical shock.
- ✓ If you notice smoke or a strange smell coming from the camera, immediately turn the camera off, wait a few minutes until the camera cools, and remove the battery.

Cleaning the Camera Lens

- 1** Blow gently on the lens to remove dust and dirt.
- 2** Moisten the lens by breathing lightly on it.
- 3** Wipe the lens gently with a soft, lint-free cloth or an untreated lens-cleaning tissue.

Storing the Camera

Remove the battery if the camera will not be used for an extended period of time. This will prevent camera damage from battery leaks or corrosion.

General Maintenance and Safety...

- ☞ Do not use cleaning solutions unless they are designed specifically for camera lenses. Do not wipe the camera lens with chemically treated eyeglass lens tissues as it may scratch the lens.

Problem	Cause	Solution
Part of the image is missing.	Something was blocking the lens when the image was captured.	Keep hands, fingers, or other objects away from the lens when capturing images.
	Your eye or the image was not centered correctly in viewfinder.	Leave space around subject when centering image in viewfinder.
Stored images are damaged.	The battery was inserted or removed when the Power, Busy, or Memory Full lights were still lit.	Make sure the Power, Busy, and Memory Full lights are off before inserting or removing the battery.
Blurred images	Subject too close.	Stand at least 2 feet away.
	Subject or the camera moved while image was captured.	Hold camera steady until you hear the shutter click. In low light the camera clicks twice.
Power, Busy, and Memory Full lights simultaneously turn on and the Shutter button jams.	Static electricity or inappropriate operation.	Turn the camera off and remove the battery. Wait 1 minute, return battery to camera, and turn camera on.

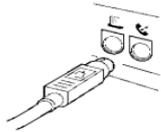
If the difficulties persist, refer to the **Where to Get Help** section of this user's guide.

If you are experiencing difficulties with your DC20 camera, check the following table for possible solutions.

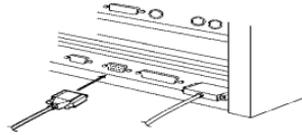
Problem	Cause	Solution
Power light blinks or does not turn on and the camera does not work.	Battery is low or empty.	Replace the battery. Images remain in the camera's memory when the battery is removed.
	Camera is not turned on.	Press the Power button and verify that the green Power light turns on.
Shutter button does not work.	Busy light is on. Camera is processing image.	Wait until Busy light turns off before attempting to capture another image.
	Memory Full light is on. Camera memory is full.	Transfer images to your computer and erase them from the camera's memory.

Troubleshooting...

- 1 Turn off the DC20 camera.
- 2 Plug one end of the serial cable into the printer or modem port (on a Macintosh) or a COM port (on a PC) on the back of your computer.

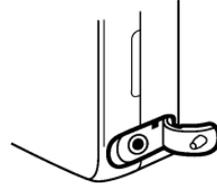


Macintosh computer



PC or compatible computer

- 3 Lift the rubber tab on the camera.

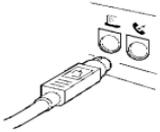


- 4 Plug the other end of the serial cable into the camera's serial port.
- 5 Turn on the camera.

Once the DC20 camera is connected to your computer, you are now ready to transfer the images. You can use the software application included with your DC20 camera.

If you have not installed the software yet, do it now. Refer to the software's getting started guide or on-line help for instructions on how to install the software. The colors on your monitor may need adjustment. Refer to your monitor's user's manual for instructions.

Connecting to a Computer...



- ☞ If your computer has a 25-pin port, you need to purchase a 9-pin adapter and attach it to the port before attaching the serial cable to the computer.

The DC20 comes complete with creative software applications, and TWAIN or Plug-In ability to interface with other applications. These can be used to make personalized images to share with family and friends.

Refer to the software's reference guides (included with the camera packet), software's on-line help, or contact the manufacturer for software instructions. Refer to the CD's Read-Me file for TWAIN and Plug-In information.

Checking Serial Port Availability

If you are experiencing difficulties with a software application, your computer may not have the correct serial port configuration.

To verify that there are no serial port conflicts with other items on your computer, refer to the serial communication or corresponding section of your computer's or operating system's (Windows, Macintosh) user's guide.

Is the camera...

- ✓ properly connected to your computer?
- ✓ turned on?

On the computer, is the...

- ✓ software installed correctly?
- ✓ DC20 camera connected to a serial port that is not only physically free, but also free to run the software?
- ✓ turn off or disable AppleTalk, Express Modem, GlobalFax, and any loaded Speed Doublers.
- ✓ specify an external or normal modem.
- ✓ run Extensions Manager on minimal if running Systems 7.5 or higher.

Software Applications...

 Before you run the software verify:

 Before loading the software on a Macintosh computer or PowerBook, you may need to:

Automatic Power Off

If you do not use the DC20 camera for about 90 seconds, it automatically turns off. To turn the camera on again, press the Power button.

Resolution Modes

Resolution mode	Number of stored images	Image size
High	8	493 x 373 pixels
Standard	16	320 x 240 pixels

To check the resolution mode, turn the DC20 camera on and observe the order in which the Power, Busy, and Memory Full lights blink.

High mode—orange Busy light blinks once, then the green Power light turns on.

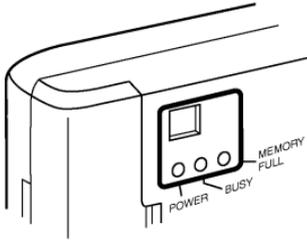
Standard mode—orange Busy light, green Power light, and red Memory light complete a series of blinks, then the Power light stays on.

To change the camera's resolution, open the PhotoEnhancer software's express dialog (or TWAIN Acquire) from *File* menu. Click on *Photo Center*, then click on *Go to DC20*, select *Camera, Resolution*.

Memory Full

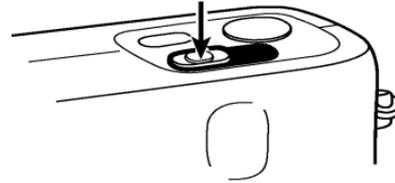
When the DC20 camera's memory is almost full, the red Memory Full light blinks to indicate how many additional images can be stored.

- 3 blinks = 3 additional images
- 2 blinks = 2 additional images
- 1 blink = 1 additional image
- steady light = memory is full



Erasing Images

- 1 Press the Power button to turn on the camera.
- 2 Press and hold down the Erase button until the orange Busy light stops blinking and stays on.



- 3 Release the Erase button.

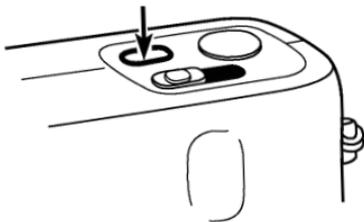
The Busy light stays on while all the images are being erased. The Busy light turns off when the images are erased.

☞ The Memory Full light stays on when the camera's memory is full. You must erase the existing images to capture additional images. To save images, transfer them to your computer before erasing them.

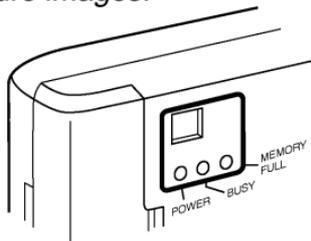
☞ You cannot selectively erase images. When you press the Erase button, all the images are erased.

Capturing Images

- 1 Press the Power button to turn on the camera.

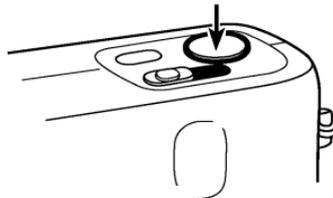


The orange Busy light briefly turns on. When the Busy light turns off, the camera clicks and the green Power light turns on indicating the DC20 camera is ready to capture images.



- 2 Position the subject in the viewfinder.

- 3 Gently press the Shutter button.



Hold the camera steady until it clicks. In low light the camera clicks twice.

While the Busy light stays on for approximately 5 seconds as the camera processes the image, you do not need to hold the camera still. You cannot capture another image until the Busy light turns off.

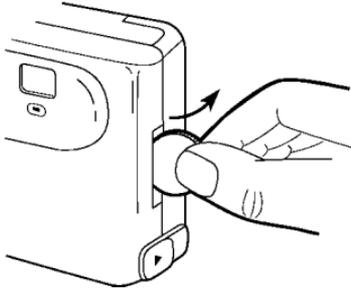
Using Your DC20 Camera...

 The captured image may vary slightly from the image framed in the viewfinder.

 The red Memory Full light remains off until there is room for three additional images.

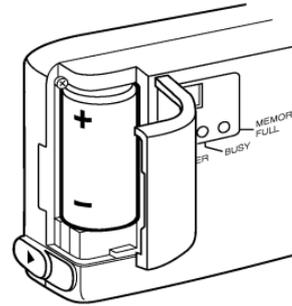
Installing the Battery

- 1 Place the edge of a thin coin into the battery door notch.



- 2 Using the coin, push the battery door toward the back of the camera.

- 3 Insert the 3V lithium battery into the battery compartment with the (+) end at the top of the camera.



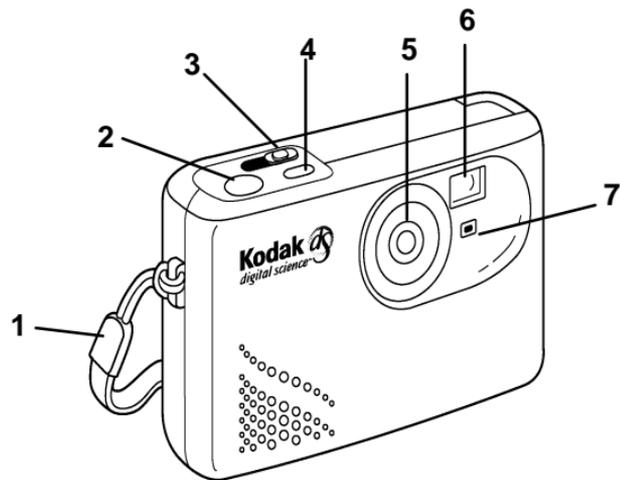
- 4 Snap the battery door closed.

WARNING:

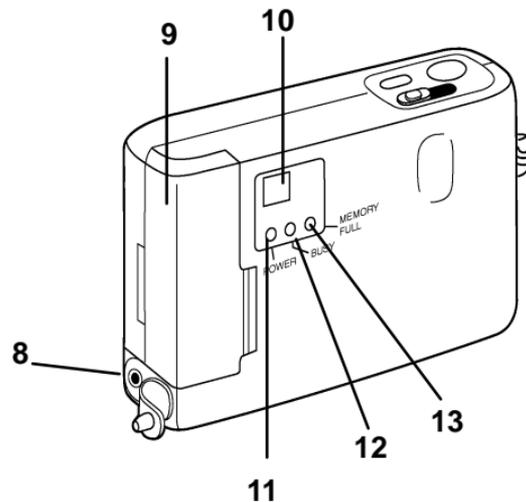
- *Read and follow all warnings and instructions supplied by the battery manufacturer.*
- *Keep the battery away from children.*
- *Do not attempt to disassemble, recharge, short out, or subject the battery to high temperature or fire.*
- *Be sure to properly dispose of the depleted lithium battery.*

 A blinking Power light indicates low battery power.

Your DC20 Camera



- 1** Wrist Strap
- 2** Shutter Button
- 3** Erase Button
- 4** Power Button
- 5** Camera Lens
- 6** Viewfinder Lens
- 7** Autosensor



- 8** Serial Cable Connection
- 9** Battery Door
- 10** Viewfinder
- 11** Power Light
- 12** Busy Light
- 13** Memory Full Light

Where to Get Help

If you are experiencing difficulties with the DC20 camera, help is available from the following resources:

- ✓ the **Troubleshooting** section of this user's guide.
- ✓ for help with non-Kodak products packaged with the DC20 camera, contact the manufacturer of that product.
- ✓ your place of purchase.
- ✓ World Wide Web at **<http://www.kodak.com>**
- ✓ product information by fax, refer to **Appendix A**.
- ✓ technical support, refer to **Appendix B** for the appropriate phone number. Have the DC20 camera connected to your computer, its serial number ready, and be at your computer when you call.

This user's guide provides detailed operating instructions for your new DC20 camera.

Instructions on how to install and use the enclosed software is available in the software's getting started guide or on-line help.

Package Contents

- ✓ DC20 camera
- ✓ DC20 camera user's guide
- ✓ one 3V lithium battery
- ✓ two serial cables (one for Macintosh and one for PC or compatible systems)
- ✓ CD containing one TWAIN Acquire Module for Windows, ADOBE PHOTOSHOP-compatible plug-in for Macintosh, and software applications
- ✓ software's getting started or user's guide

Getting Started...

Congratulations and thank you for purchasing the *Kodak Digital Science™* DC20 camera (DC20 camera). Your new DC20 camera offers portable digital photography with the point and shoot convenience of a lightweight, pocket-size camera.

The DC20 camera package has everything you need to easily capture images and transfer them to your computer. Simply use the enclosed software to create personalized images to share with family and friends.

It's as simple as click, transfer, and create!

System Requirements

Windows system requirements:

- ✔ 80386 or higher IBM PC or compatible
- ✔ Windows version 3.1 or later
- ✔ VGA color video display (Super VGA display recommended)
- ✔ 6 MB or more of extended memory available
- ✔ available CD-ROM drive and serial port

Macintosh system requirements:

- ✔ 68020 or higher Macintosh computer
- ✔ System 7.1 or later
- ✔ 8-bit color display (24-bit display recommended)
- ✔ 8 MB RAM or more available
- ✔ available CD-ROM drive and serial port

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 For **Software Instructions**, refer to the PhotoEnhancer guide and Kai's Power Goo Quick Reference Guide included with the camera packet.

Kodak Digital Science™



DC20 Camera

User's Guide